

# Draft Directive 056 (released September 2022)

## What We Heard – And Our Response



We would like to thank all those who provided comments to *Directive 056: Energy Development Applications and Schedules*. We reviewed each one and consolidated comments covering similar issues. What follows is a summary of the issues raised, in no particular order, and our responses.

Comments on grammar, punctuation, and cross-referencing have not been summarized, but changes were made where needed.

A list of the respondents is provided at the end of this document.

Stakeholder Feedback – Issue	AER Response
1. Definitions	
Remove the words “pipeline” and “other right-of-way” from the definition of surface improvement. This infrastructure generally accompanies a facility and should therefore be assumed present.	Removing those words would not materially improve the definition of “surface improvement.”
Lithium should be included in the definition of “brine-hosted mineral resources” or “mineral” in <i>Directive 056</i> .	The term “mineral resources” is defined in Part 1 of the <i>Mineral Resource Development Act (MRDA)</i> and the <i>Mineral Resource Development Regulation</i> . Although not expressly listed in the definition, lithium is a mineral resource.
The definitions of “participant,” “participant involvement,” “landowner,” and “Freehold land” should include both surface and mineral rights holders.	<p>The definitions of “participant” and “participant involvement” encompass organizations, communities, groups, and individuals with a stake in the discovery, development, and delivery of Alberta’s resources. As a result, these definitions are inclusive of surface and mineral rights holders.</p> <p>Including a reference to “surface and mineral rights holders” in the definition of “landowner” would not improve the definition. Not all surface and mineral rights owners will be landowners; they may only have rights to the surface and subsurface through a lease, licence, or private agreement.</p> <p>Including a reference to “surface and mineral rights holders” in the definition of “Freehold land” would not improve the definition.</p>

Stakeholder Feedback – Issue	AER Response
2. Freehold Mineral Rights	
<p>Regarding Freehold mineral interests, public authorities like the AER are required to protect equity. As competing use of pore space becomes more common, the AER needs to develop appropriate spacing and unitization definitions and regulations that consider the equity interests of Alberta’s Freehold mineral rights owners.</p>	<p>Companies interested in developing Freehold minerals will have to negotiate with Freehold mineral owners directly. If there is a scenario where the development of Crown and Freehold mineral resources may occur simultaneously, then a mutually agreeable arrangement between all parties would be required.</p> <p>A drilling spacing unit (i.e., well spacing) has not been defined for brine-hosted mineral resource development. As more information becomes available about competing pore space and potential impacts on equity, a drilling spacing unit may be established for brine-hosted mineral resources to ensure orderly development. As set out in section 3.2.1 of <i>Directive 090</i>, we will collect information about subsurface setbacks from each well application to aid in informing this issue.</p>
3. Participant Involvement	
<p>It is unclear how public involvement requirements apply to Freehold mineral rights owners. Specifically, are Freehold mineral rights owners included on leased lands? How does a Freehold mineral rights owner formally express concerns about potential drainage issues?</p>	<p>Participant involvement requirements are noted in <i>Directive 056</i>. It is the applicant’s responsibility to assess the area beyond a specified radius to determine if the radius for participant involvement should be expanded. The radius may need to be expanded to include public interest groups or others who have expressed an interest in the proposed activity.</p> <p>Freehold mineral owners and other stakeholders (e.g., offset companies) are notified through the subsurface requirements in <i>Directive 065: Resources Applications for Oil and Gas Reservoirs</i> and <i>Directive 090</i>. All applications for brine-hosted mineral resource development are subject to notice of application under the <i>Responsible Energy Development Act (REDA)</i>. A statement of concern (SOC) can be submitted for our consideration if there is an outstanding concern regarding drainage or any other issue.</p> <p>Before being granted any energy resource activity licence or approval, the applicant must provide proof of having the necessary rights. For more information or clarification regarding tenure, please contact the Ministry of Energy.</p>

Stakeholder Feedback – Issue	AER Response
4. Carbon Capture, Utilization and Storage (CCUS)	
How does CCUS fit into <i>Directive 056</i> ? The AER should use the same terminology to describe reservoirs that contain brine-hosted minerals.	<p>We are in the process of updating <i>Directive 056</i> and <i>Manual 012</i> to ensure that well licensing allows for the selection of appropriate CCUS well types and substances. These revisions will ensure that CCUS fits into the directive.</p> <p>We will use consistent terminology to ensure a clear distinction between formations used for CCUS and those that contain brine-hosted mineral resources.</p>
5. Document Consistency	
There are sections and tables in <i>Directive 056</i> that need to be updated to be inclusive of brine-hosted mineral development. The <i>Directive 056</i> brochure and EnerFAQs also need to be revised.	<p>We will ensure requirements for brine-hosted minerals and other energy resources are included where necessary throughout <i>Directive 056</i> or provide appropriate references to requirements that apply exclusively to brine-hosted mineral resource wells and facilities being licensed through <i>Directive 056</i> processes.</p> <p>We are considering various options to better inform stakeholders regarding the application processes and the associated regulatory frameworks for brine-hosted mineral resource developments and geothermal developments. Stakeholders will be provided with more information once approval processes and requirements are finalized.</p>
6. Drill Cutting Samples	
Regarding drill cutting sample requirements, there are problematic differences in well classification between <i>Directive 056</i> (table 11) and the draft brine-hosted minerals directive. They should be consistent.	<p>Brine-hosted mineral resource development does not have designated pools or prescribed drilling spacing unit boundaries. Therefore, Table 11 of <i>Directive 056</i> is not applicable. The specific drill cutting sample requirements for brine-hosted mineral resources are included in <i>Directive 090</i>. Please contact us with questions related to drill cuttings at <a href="mailto:Minerals@acr.ca">Minerals@acr.ca</a>.</p>
7. Subsurface Rights and Coproduction	
The AER should clarify its regulations to allow for the coproduction of Alberta’s energy resources.	<p>Concurrent production of various energy resources is permitted under the <i>MRDA</i>. Specific requirements allowing for concurrent production are set out in the <i>Brine-Hosted Mineral Resource Development Rules (BMR)</i> and <i>Directive 090</i>. Furthermore, the <i>MRDA</i> requires that applicants secure necessary rights. We will not issue a licence unless the applicant can prove they have the rights to the substances they are applying to develop.</p>

Stakeholder Feedback – Issue	AER Response
<p>Section 3.1 should be updated to include the phrase “together or separately” where mineral title is referenced, and it is now possible to have 4+ sets of subsurface rights underlying one parcel of land, not 2.</p>	<p>No changes were made to section 3.1 of <i>Directive 056</i>. The intent of section 3.1 is to broadly reference surface versus subsurface rights and not specify all types of subsurface rights that could be secured. Furthermore, adding “together or separately” does not materially improve the sentence. However, <i>Directive 056</i> is being amended to ensure that references to “oil and gas” are revised to “energy resources” as defined in <i>REDA</i>.</p>
<p>Section 4.9.8 should be updated to both specify and clarify different types of mineral rights—e.g., petroleum and natural gas, metallic and industrial mineral, and geothermal.</p>	<p>No changes were made to section 4.9.8 of <i>Directive 056</i>. The intent is to broadly identify the rights that must be secured for “all intents and purposes.” “Mineral rights” includes petroleum and natural gas (P&amp;NG), metallic and industrial mineral (MIM), and geothermal.</p>
<p>There may be situations where applicants separately own either P&amp;NG or brine-hosted mineral rights, or where one applicant owns both and wishes to coprocess both resource types simultaneously from a single well. The requirements in <i>Directive 056</i> should be updated to create an application process to permit coproduction of different types of energy resources within the same lease.</p>	<p>Section 7.3 of <i>Directive 090</i> addresses concurrent production schemes. We are developing processes to manage various coproduction scenarios and will update the appropriate directives as necessary.</p>
<p>8. Drilling Spacing Units (DSU)</p>	
<p>Drilling spacing units are required to enable equity between Crown and Freehold mineral rights owners. A DSU should be included in relevant energy resource enactments and sections of <i>Directive 056</i> for brine-hosted mineral development.</p>	<p>Development of Crown and Freehold land would require establishing an agreement between all parties. The DSUs set out in the <i>Oil and Gas Conservation Rules</i> and AER directives were based on significant historical production data. We currently do not have sufficient information to calculate a proper DSU that would ensure orderly development for brine-hosted minerals. We will be collecting data in order to develop an informed response to potential brine-hosted mineral drilling spacing unit issues.</p> <p>Also, all applications for brine-hosted mineral resource development are subject to notice of application under <i>REDA</i>. An SOC can be submitted for our consideration if there is an outstanding concern.</p>

Stakeholder Feedback – Issue	AER Response
9. Reuse of Existing Sites	
<p><i>Directive 056</i> should be amended to allow for the reuse and sharing of existing leases and infrastructure for brine-hosted mineral and geothermal development.</p>	<p>Section 5.6.3, “Proliferation,” currently applies to facilities and pipelines associated with all energy resources, including brine-hosted minerals and geothermal developments. We will evaluate section 5.6.3 of <i>Directive 056</i> and the other relevant directives to determine if additional text amendments are appropriate to encourage reuse of existing or reclaimed sites. In addition, the <i>BMR</i> and <i>Directive 090</i> provide requirements related to the conversion and reuse of existing infrastructure.</p>
10. Single-Well Facility	
<p>As written, brine-hosted mineral well sites are excluded from section 5.4.1 regarding single-well facilities. They should be included.</p>	<p>Geothermal resource and brine-hosted mineral resource single-well facility sites are ineligible for the exemption. Given the emerging industry, We need to gather more information on the equipment at well sites before an exemption can be provided. As more information becomes available, the exemption may be applied.</p>
11. Consultation and Notification Requirements	
<p>Currently, there are no requirements to notify or confirm “nonobjection” from mineral rights owners other than petroleum and natural gas. Confirmation of nonobjection for metallic and industrial mineral rights owners should be included.</p> <p>Furthermore, tables 1 through 5 need to be updated to include infrastructure used to develop brine-hosted minerals to account for both technical and public involvement requirements. For example, “multiwell pad” should be included in table 5.</p>	<p>An SOC can be submitted by a mineral rights owner for our consideration if there is an outstanding concern with an application. In addition, <i>Directive 056</i> provides notification requirements for production wells, and <i>Directive 090</i> provides notification requirements for injection wells.</p> <p>Table 1 of <i>Directive 056</i> has been updated to include coding and commentary for brine-hosted minerals and will be updated to clarify brine-hosted minerals and geothermal activities as necessary. Changes are not required for tables 2 through 5. “Multiwell pad” is already identified in table 5.</p>



**Stakeholders Who Submitted Feedback** (in alphabetical order)

Bruce 1892 Inc.

E3 Lithium Limited

Freehold Owners Association

Imperial Oil Limited

Tuxtla Gas Engineering Ltd.